

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	77756	((FEE OR POSTAGE OR PRICE OR COST OR CHARGE) NEAR5 (WEIGH OR WEIGHING OR SCALE OR WEIGHT))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:37
2	BRS	L2	6783	((IMPRINT OR IMPRESSION OR STAMP OR INDICIUM OR INDICIA OR LABEL) NEAR5 (FRANKING OR MAILING OR POSTAGE OR SHIPPING OR FRANK OR MAIL OR SHIP OR POST))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:38
3	BRS	L3	1	((IMPRESSSION OR INPRINT) NEAR5 (FRANKING OR MAILING OR POSTAGE OR SHIPPING OR FRANK OR MAIL OR SHIP OR POST))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:38
4	BRS	L4	2207	(2 or 3) NEAR5 (PRINT OR PRINTED OR PRINTING)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:38
5	BRS	L5	3921	(2 or 3) NEAR5 (STAMPING OR STAMP OR PRINT OR PRINTED OR PRINTING)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:38
6	BRS	L6	1	(INPRINTED OR INPRINTING OR INPRINT) NEAR5 (2 or 3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:38
7	BRS	L7	514	(2 or 3) NEAR5 (IMPRINT OR IMPRINTING OR IMPRINTED)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:38

	Type	L #	Hits	Search Text	DBs	Time Stamp
8	BRS	L8	20	(2 or 3) NEAR5 (IMPRESS OR IMPRESSING OR IMPRESSED)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:40
9	BRS	L9	0	(impress or impressing or impressed) near5 (2 or 3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:41
10	BRS	L11	4088	(2 or 3) and (3 or 4 or 5 or 6 or 7 or 8 or 9)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:43
11	BRS	L12	441	1 and 11	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:44
12	BRS	L13	9969	((PAYING OR PAID OR PAY OR PAYMENT) NEAR5 (SMARTMODULE OR SMARTCARD OR DEBIT OR CREDIT OR CARD OR MODULE))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:43
13	BRS	L14	7511	((SMARTMODULE OR SMARTCARD OR DEBIT OR CREDIT OR CARD OR MODULE) NEAR5 (CHARGING OR CHARGE OR CHARGES))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:44
14	BRS	L15	93	12 and (13 or 14)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/02/15 13:45

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	Document ID	Issue Date	Inventor	Current OR	Current XRef	Pages
1	NN950453	19950401				NA
2	JP 06149815 A	19940531	ARIMORI, FUKUO			3
3	US 20020007281 A1	20020117	GIL, ASHER et al.	705/1		53

L15 results

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ABSTRACT: An automated self-service mail processing and storing system is disclosed which is capable of receiving input from and providing instructions to a user via a touch-sensitive screen or a digitized voice system. The system is capable of weighing the mail item, receiving user identification information from a credit/debit card, for example, for payment, calculating the charge for shipment and deducting that amount from the user's charge account, and securely storing the item for subsequent pickup. The system contains a novel weighing means capable of detecting minute vibrations for purposes of obtaining an accurate weight amount. The system may also contain a tracking bar code generation means and a tracking bar code verification system. Optionally, a dual floppy disk system allows the user to send electronic mail, and a built-in facsimile apparatus allows the user to send "FAX" information through the telephone line. Also disclosed is a two-way communication means coupled between the mail processing and storing system computer and a remote computer station for providing such functions as credit authorization and charge reporting, transaction and tracking information transfers, error reporting, etc.

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ABTX: An automated self-service mail processing and storing system is disclosed which is capable of receiving input from and providing instructions to a user via a touch-sensitive screen or a digitized voice system. The system is capable of weighing the mail item, receiving user identification information from a credit/debit card, for example, for payment, calculating the charge for shipment and deducting that amount from the user's charge account, and securely storing the item for subsequent pickup. The system contains a novel weighing means capable of detecting minute vibrations for purposes of obtaining an accurate weight amount. The system may also contain a tracking bar code generation means and a tracking bar code verification system. Optionally, a dual floppy disk system allows the user to send electronic mail, and a built-in facsimile apparatus allows the user to send "FAX" information through the telephone line. Also disclosed is a two-way communication means coupled between the mail processing and storing system computer and a remote computer station for providing such functions as credit authorization and charge reporting, transaction and tracking information transfers, error reporting, etc.

BSTX: [0007] While perhaps not widely used commercially, there are several types of automated self-service mailing machines for processing mail for shipment described in various U.S. patents. U.S. Pat. No. 5,233,532 to Ramsden, for example, is directed to a mailing system which allows a user to process and store mail items for subsequent pick-up by a commercial carrier. In particular, the user is able to enter identification information into the system for purposes of payment, enter destination information for shipment, weigh the item, obtain a charge for shipping the item, and deposit the item into a locked storage area. The system contains an intermediate deposit area ("secured deposit means") which is separated by two inner doors from the storage area. The system contains an electronic scale separate from the intermediate deposit area. After the item is weighed, it is placed into the intermediate deposit area. Once the user closes an outer door to the intermediate area, the item is moved through the inner doors by a series of rollers into a storage area. While this reference suggests the re-weighing of the item to obtain an accurate weight, there is no mechanism to prevent the user from weighing a lighter object to obtain a low cost, and then placing into the intermediate deposit area the heavier item to be shipped.

BSTX: [0008] U.S. Pat. Nos. 5,065,000 ("'000"), 4,923,022 ("'022"), and 5,025,386 ("'386") to Pusic are also directed to automated mail systems designed to process and store items, in particular letters. The systems described in these references contain internal weighing means and means for printing machine-readable information (i.e. bar codes) onto the item to be mailed. These references do not appear to teach or suggest a single, rotatable postage meter for generating and dispensing postage meter stamps or strips, nor do they teach a weighing scale capable of detecting minute vibrations that will not operate until such vibrations are absent. Moreover, the references do not teach a tracking bar code verification system to verify that a letter has a tracking bar code or a readable tracking bar code on it.

BSTX: [0009] Thus, it is desirable to have an automatic self-service mail processing and shipping system that allows a user to weigh the mail item securely and accurately to prevent tampering, select from several different mail services (e.g. package or letter, First Class or International), calculate and pay the charge for shipping, obtain a receipt, securely store the item for subsequent pick-up by a commercial carrier, and that is fully capable of processing and storing packages as well as letters. It is also desirable to have a system that includes a single postage meter that is capable of printing a stamp directly onto a letter as well as dispense a postage meter strip for subsequent affixation onto a package or letter.

BSTX: [0015] control means for calculating a shipment fee for the item, said control means being in communication with said weighing means and said information inputting means;

BSTX: [0016] means in communication with said control means, for accepting identification information relating to eventual payment from the customer, said communication means comprising means for receiving and reading a credit card, means for communicating the charges information to a central location for billing the charges to said customer;

BSTX: [0023] (1) Credit authorization and charge reporting;

DRTX: [0037] FIG. 4b is a top view of the inventive system's rotatable postage meter at elevation +40.00" showing the rotatable postage meter in the retracted, home position for printing a postage meter stamp onto a letter.

DRTX: [0038] FIG. 4c is a top view of the inventive system's rotatable postage meter at elevation +40.00" showing the rotatable postage meter in the forward position and ready for printing a postage meter stamp onto a letter.

DETX: [0064] Next, a postage meter (211) is orientated into the correct position for generating a postage meter stamp or strip. For letters, the postage meter (211) is designed to print the postage meter stamp directly onto the letter. For items such as packages or letters that are not fed through the postage meter, the postage meter is preferably capable of printing and dispensing a postage meter strip for subsequent affixation onto the item by the user. Preferably, a rotatable postage meter is used which will dispense the stamp in the form of a postage meter strip directly to the user through the outer housing. This postage meter rotation system (205) is HAS completely controlled via the computer (1308) and digital I/O port B (See FIG. 6a). The computer (1308) will utilize a software control program which rotates the meter according to pre-determined conditions. If the postage meter (211) is in the home or retracted position (b) as shown in FIG. 4b, for example, the software program via the computer (1308) will cause the postage meter (211) to move forward toward the front side of the outer housing (position c) utilizing a horizontal linear actuator (207) and a translation table (216), as shown in FIG. 4c, for example. This movement will bring the postage meter (211) to a position for receiving a letter and for printing a postage meter stamp directly onto the letter.

DETX: [0067] Once the letter is weighed, the computer will receive the weight measurement via the A/D weigh card (1202), and utilizing the rate tables stored on the computer hard disc (1210) and the software program, the computer (1308) will calculate the cost for sending the letter. After the system displays the charge amount to the user, the user is requested to touch the touch-screen (110) which will display an Approval Touch Button for purposes of continuing the transaction. Where an autofeed mechanism is not used, the user is asked to insert the letter into the letter acceptance slot (104), located behind the outer letter security door (213), to continue the mailing transaction. Alternatively, the user may select other options in lieu of continuing the transaction, in particular to cancel the transaction or perform a different transaction. Once the user touches this button, the computer will activate the postage meter (211) through relay (1231) (FIG. 6a), lower the outer letter security door (213), and then activate the automatic transport means (149) (if present). This will send the letter, guided by a letter guide (212), into the postage meter (211). Once the letter passes through the postage meter and is imprinted with the postage meter stamp, the letter will hit the letter deflector (208) which will direct the letter into a secured storage area, such a letter tray (134), preferably located below the postage meter as shown in FIGS. 1a and 4a. Once the letter passes through the postage meter (211), the outer letter security door (213) will close and will not open again until another letter is detected by the optical sensor (225) (FIG. 4).

DETX: [0069] To process and store a package for mailing, the user preferably follows the flow

diagrams illustrated in FIGS. 16a-16b. Similarly, the following description for processing and storing a package could be applied to a letter. Once the user has entered payment, most preferably his or her user identification information, and has selected to mail a package, the computer will activate a mechanism, including a software controlled system, to position the postage meter (211) into the correct orientation for printing and dispensing a postage meter strip directly to the user. As discussed above, the postage meter (211) is preferably also capable of directly printing a postage meter stamp onto a letter. Thus, in order to dispense a postage meter strip directly to the user for affixation onto a package, for example, a preferred aspect of the present invention is that the postage meter (211) be capable of rotating, as previously discussed in greater detail, so that the postage meter can dispense the postage meter stamp directly to the user through the front side of the outer housing (102a). For dispensing a postage meter stamp, if the postage meter is not in the home or retracted position (d), as shown in FIG. 4d, the software controlled system will properly orientate the postage meter by first retracting the postage meter from forward position (c) to the home position (b) by utilizing a linear actuator (207) if the limit switch (221) is not activated. Once the limit switch (221) is activated, the software control program will operate the rotation motor (202) which will rotate the postage meter about 180 degrees to a new position (d), as illustrated in FIG. 4d, which will be detected by limit switch (209). Once this rotation is completed, the postage meter will move forward to position (e), as shown in FIG. 4e, utilizing linear actuator (207), which will stop automatically by utilizing an internal switching mechanism. Another aspect of the postage meter (211) is that it preferably contains an optical sensor (220) to sense the presence of postage meter strips in the special built-in meter strip holder (299). If the optical sensor (220) senses no meter strips in the holder (299), it will send a signal utilizing digital I/O port B. The computer (1308) in turn will display a video message on a display screen (110), or communicate via an audio means that the holder (299) is empty and inhibit the package mailing operation until such time as more meter strips are added to the postage meter (211).

DETX: [0071] Once the computer (1308) identifies the correct information from the user information card, for example (i.e. if payment is made by this means), it will transmit this information via modem (1262) and telephone line (1264) (FIGS. 6b-6c) to an external credit/debit authorization service center. Once the authorization is obtained, the software program will automatically activate the next screen which will request the user to make a selection between various services offered through the particular commercial carrier. By using a communication means, preferably either digitized voice instructions or video instructions, the user will be instructed to put his or her package into a secured item acceptance area or holding area (106). An outer security door (108) will automatically open, as discussed in more detail below, and the user will be able to place his package within a holding space or zone containing an item-holding platform or bin (108) capable of tilting towards the back side of the outer housing (102b) to deposit the item into a secured storage area (410) at the appropriate time. The tilting mechanism used to deposit the item into a secured storage area (410) is discussed in more detail below.

DETX: [0074] If the user desires to print his own shipping label, he will be able to do so by touching a print label touch button which will activate either a touch-screen alphanumeric keyboard (110) or a hidden-keyboard (156), which will come out for the user to use, such as that

illustrated in FIG. 1b, for example. Once the user has completed typing in the label, he will again touch the Print Label Button, at which time the hidden keyboard (156) will retract, and a label will be printed utilizing package label printer (142) (FIGS. 1a, 1b, and 6c). A user may also select to print a bar code label which can be utilized as a Zip+4 label or a tracking label. This label will be printed automatically using the address information entered by the user and utilizing bar code printer (127) (FIGS. 1a, 1b, and 6c).

DETX: [0075] Once the user has completed pasting on the postage meter strip, the address label, and optionally the bar code label on his package, he will return the package to the secured item acceptance area (106), specifically onto the item-holding platform or bin (408). At this time, the outer security door (108) will automatically close to prevent the user from having access to the package. Once the outer security door (108) is closed, the computer (1308) will perform a second weighing in order to verify that the package weight has not been changed. If the second weight amount does not differ from the first weight amount, the mechanism for depositing the item into the secured storage area is activated by means of a linear actuator (409). The linear actuator (409) causes the platform (408) to tilt via using at least one mechanical arm (404), which in turn will open the inner door (402), and the package (602) will preferably drop onto padded step (403) which dampens the fall of the package (602) as it is deposited into the secure storage area or zone (410). Once this area is full to the point that the next item is unable to slide off the tilting platform (408), a built-in optical sensor (411) on the platform (408) will prohibit the movement of the linear actuator (409) and will cause a message to appear on the system that the internal storage area (410) is full. It will also send a message to this effect, utilizing Modem (1262), to an external monitoring station which will inform the carrier to provide an unscheduled pick-up.

DETX: [0078] If the user decides to buy a book(s) of stamps, which are the standard type provided by the U.S.P.S., he will be able to do so by either paying with his credit/debit card or utilizing cash (dollar bills) via a cash acceptor (152). To utilize his credit/debit card, the user will follow a similar path as described previously, however he will select Book of Stamps. He then will be required to indicate, by touching the touch-screen, how many books he desires. Once he touches the desired number, the computer will operate the stamp dispenser relay (1231) and the books will be dispensed via the stamp dispenser (153). If the user selects cash, he will be instructed on the screen to place his money into the cash acceptor (152). Once the correct amount of cash is received by the system, which is transmitted to the computer via a communication port 2 (FIG. 6b), the computer (1308) will activate relay (1231), which in turn will dispense the correct number of books through stamp dispenser (153). The inventive system (100, 101) may also include a user pre-processing area comprising, for example, a work tray (114) and a ruler (116) to assist the user in preparing his or her letters or packages for processing and storing in the system.

DETX: [0082] A system comprising such a tracking bar code system is illustrated in FIG. 1b. As discussed above, however, it is contemplated that additional features, such as a letter weighing scale or postage meter, for example, could be included, as well.

DETX: [0083] Referring now to FIGS. 1b and 5, the mailing system (101) preferably contains an area for processing letters and an area for processing packages. For processing letters and packages, the user begins the operation of the system (101) the same way as for the system (100) described above and illustrated in FIG. 1a. However, for processing letters for U.P.S., for example, the use of special labels or forms containing the tracking bar code for subsequent affixation onto an envelope does not necessitate the use of a weighing scale or postage meter. Similarly, while U.P.S. as well as perhaps some other carriers do base their charges for shipping a package in part on weight, no postage stamp is required, thus rendering a postage meter unnecessary. However, such a system could include a postage meter, if desired.

DETX: [0086] For processing letters requiring a tracking bar code, this alternative embodiment of the inventive system (101) will ensure that no envelope is accepted into the letter tray (134) without first checking that the tracking bar code has been pasted or printed on the envelope, or has been allocated by the computer or scanned manually by the user using the external bar code scanner (151). For U.P.S. and perhaps some other carriers, the user must use designated envelopes and labels or forms for affixation onto the envelope supplied by the carrier, wherein the labels or forms contain the individual tracking bar code. The carrier will charge the user a fixed fee as long as the user uses the designated labels and envelopes for sending his or her documents. These labels and envelopes may be stored in a tilt-out supply cabinet (119), such as the one shown in FIG. 1b, for example. The user will then follow the digitized voice instructions or the visual instructions on the touch-screen (110) to continue the transaction. Once the user has entered all the information requested by the carrier so that the computer can calculate the shipping charge, this shipping charge will be displayed on screen (110), and an Approval Touch Button will be displayed for purposes of continuing the transaction. Once the user has touched this button, the outer letter security door (206) will open to reveal a letter chute (205). Once the user places the envelope into the letter chute (205), the optical sensor (204) will activate the internal bar code scanner (155). Once the bar code scanner (155) reads the tracking bar code on the envelope, linear actuator (202) will open the inner letter door (203), and the envelope will drop into the letter tray (134) below. If the bar code scanner (155) is unable to read the bar code on the envelope, it will request the user to either turn the envelope over or to enter the tracking bar code number utilizing a touch-screen (110) keypad or the external bar code scanner (151), for example. Once this is completed, the linear actuator (202) will open the internal letter door (203), and the envelope will drop into the letter tray (134) below. However, if the user has selected to print his own shipping label using printer (142), for example, which automatically prints a tracking bar code, or has used the external bar code scanner (151) to scan the bar code before placing the envelope into letter chute (205), the computer will immediately activate linear actuator (202) which will open the inner letter door (203), and the envelope will drop into the letter tray (134).

DETX: [0088] Once the computer (1308) identifies the correct information from the user information card, or example (i.e. if this means for payment is used), it will transmit this information via modem (1262) and telephone line (1264) (FIGS. 6b-c) to an external credit/debit authorization center. Once the authorization is obtained, the software program will automatically activate the next screen which will request the user to make a selection between various services

offered through the particular carrier. By using a communication means, preferably either digitized voice instructions or video instructions, the user will be instructed to place his package into a secured item acceptance area (106). An outer door (108) will automatically open as discussed above, and the user will be able to place his package on an item-holding platform or bin (408) capable of tilting towards the back side of the outer housing (102b) to deposit the item into a secured storage area (410) at the appropriate time. The same outer door mechanism as discussed above for the inventive mailing system (100) and further illustrated in FIG. 3 is applicable to this embodiment of the inventive mailing system (101). Further, the same tilting mechanism used to deposit the item into a secured storage area (410) as already discussed above for the inventive mailing system (100) is used.

DETX: [0089] The user will also be requested to input shipping designation information for the package, including the ZIP code, preferably via the touch-screen activated monitor (110). This information is processed through the computer (1308), and in conjunction with the weight information obtained later for the package, is used to calculate the shipping charge. Referring again to FIGS. 2a-2c, a weighing device (138) comprising a load cell (400) integral with a rotating block (406b) is mounted below the item-holding platform (408) which is integral with at least one mechanical arm (404) used to move the inner door (402). The rotation block (406b) is movably secured to a fixed block (406a). The user is instructed to place the package (602) onto the platform (408), which will activate the weighing device to weigh the item via the load cell (400). The load cell (400), which is connected to the computer (1308) via Analog to Digital weighing card (1202) and the software program, will not weigh the package until such time as the user has removed his or her hand. This is done by utilizing a software algorithm which will detect minute vibrations which are always present when a human being is touching a scale, as discussed above. Once the package (602) is weighed, the computer (1308) will receive the weight measurement via the A/D weighing card (1202) (FIG. 6a) and utilizing the rate tables stored on the computer hard disc (1210) and the software program, as well as the shipping designation data entered, will calculate the cost of sending this package. The user will be asked to touch the screen (110) which displays an Approval Touch Button for continuing the transaction. Once the user touches this button, he will be instructed to return the package to the secured item acceptance area (106) after he has pasted onto his package a tracking label provided by the carrier. Alternatively, if the user wishes to print his own shipping label, he will be able to do so by touching a print label touch button which will activate either a touch-sensitive screen keyboard or a hidden-keyboard (156), which will come out for the user to use. Once the user has completed typing in the label, he will touch again the Print Label Button, and a label will be printed utilizing package label printer (142). This label will be printed automatically using the shipping address information entered by the user. The printed label will include a tracking bar code which is utilized by the commercial carriers to track the movement of the package. Once the user has completed pasting the address label, which includes the tracking bar code, on his package, he will first scan this tracking label using external bar code scanner (151) and then place the package back onto the item-holding platform or bin (408) in the secured item acceptance area (106). At this time, the outer security door (108) will automatically close to prevent the user from having access to the package. Once the outer security door (108) is closed, the computer will perform a second weighing in order to verify that the

package weight has not been changed. If the second weight amount does not differ from the first weight amount, the mechanism for depositing the item into the secured storage area via the tilting motor (138) will be activated by means of a linear actuator (409). One linear actuator (409) causes the platform (408) to tilt via at least one mechanical arm (404), which in turn will open the inner door (402), and the package (602) will preferably drop onto padded step (403) which dampens the fall of the package as it is deposited into the storage area (410) below. The area below the secured item acceptance area (106) is used as an internal storage area (410) for packages or letters. Once this area is full to the point that the next item is unable to slide off the tilting platform (408), a built-in optical sensor (411) on the platform (408) will prohibit the movement of the linear actuator (409) and will display a message on the system that the internal storage area (410) is full. It will also send a message to this effect, utilizing Modem (1262), to an external monitoring station which will inform the carrier to provide an unscheduled pick-up.

DETX: [0091] If the user desires to send his letter via Electronic Mail (E-Mail) or to utilize the built-in FAX machine (120), the same system and method as discussed above for mailing system (100) and shown in the figures, such as FIG. 1a, for example, can be employed. Similarly, an E-Mail system, and F system, a postage stamp service area, and/or a user pre-processing area (as discussed above) may be included in this alternative embodiment of the inventive mailing system (101).

DETX: [0097] (1) Credit authorization and charge reporting;

DETX: [0106] The inventive mail system provides a user interface for electronic mail (E-mail) and electronic data interchange (EDI). A user can log into any remote system via the inventive mail system and use his or her personal credit card, for example, to charge for system usage time. A floppy disk device having an opening (124, 126) and coupled to the is computer (1308) is available on the outside of the outer housing for data interchange.

DETX: [0107] The inventive system may also include a communication means coupling the computer with the postage meter to provide an automatic meter imprint date change mechanism. The postage meter automatically changes the imprint date at midnight. However, the inventive mail system can send commands through the communication means to the postage meter to activate and advance the date mechanism at a designated article pickup time to reflect and print a new date after the designated pickup for that day. The same date change mechanism is used for holidays and weekends when there is no scheduled article pickup.

CLTX: 1. A system for accepting and storing items for subsequent pickup by a commercial carrier, comprising: an outer housing; means for weighing an item which a customer may intend to ship; means for inputting information relating to the destination of the item from customer; control means for calculating a shipment fee for the item, said control means being in communication with said weighing means and said information inputting means; means in communication with said control means, for accepting identification information relating to eventual payment from the customer, said communication means comprising means for receiving

and reading a credit card, means for communicating the charges information to a central location for billing the charges to said customer; a storage area defined by said outer housing; and secure deposit means for permitting a customer to securely deposit the item into the storage area, said secure deposit means including a first zone which serves as a holding space when said item is first placed in the storage area and a secure zone into which the item is moved for secure storage.

CLTX: 9. The integrated, automated, unattended unit of claim 8 wherein said fee communicating means includes means for validating said credit card prior to issuing the shipping label .

CLTX: 11. The integrated, automated, unattended unit of claim 10 wherein said fee communicating means includes means for validating said account prior to issuing, the shipping label .

CLTX: 13. A system for accepting and storing items for subsequent pickup by a commercial carrier, comprising: means for weighing an item which a customer may intend to ship; means for inputting information relating to the destination of the item from customer; control means for calculating a shipment fee for the item, said control means being in communication with said weighing means and said information inputting means; means in communication with said control means, for accepting identification information relating to eventual payment from the customer, said communication means comprising means for communicating the charges information to a central location for billing the charges to said customer; a storage area; and secure deposit means for permitting a customer to securely deposit the item into the storage area, said secure deposit means including a first zone which serves as a holding space when said item is first placed in the storage area and a secure zone into which the item is moved for secure storage and means for conveying said item from said holding space to said storage area.

CLTX: 14. A system for accepting and storing item for subsequent pickup by a commercial carrier, comprising: means for weighing an item which a customer may intend to ship, said weighing means being supported by said system; means for inputting information relating to the destination of the item from customer; control means for calculating a shipment fee for the item, said control means being in communication with said weighing means and said information inputting means; means in communication with said control means, for accepting identification information relating to eventual payment from the customer, said communication means comprising means for communicating the charges information to a central location for billing the charges to said customer; a storage area; and secure deposit means for permitting a customer to securely deposit the item into the storage area, said secure deposit means including a first zone which serves as holding space when said item is first placed in the storage area and a secure zone into which the item is moved for secure storage.

CLTX: 18. The integrated, automated, unattended unit of claim 16, wherein said fee communicating means includes means for validating said account prior to issuing the shipping label .